PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)



| 03FKWM023 | FOR FURTHER ACTION as | see Form PCT/ISA/220 well as, where applicable, item 5 below. | | | | | |
|--|--|---|--|--|--|--|--|
| International application No. | International filing date (day/month/year) | (Earliest) Priority Date (day/month/year) | | | | | |
| PCT/KR2004/001727 | 13 JULY 2004 (13.07.2004) | 21 JULY 2003 (21.07.2003) | | | | | |
| Applicant | | | | | | | |
| LG ELECTRONICS,INC. et al | | | | | | | |
| This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau. | | | | | | | |
| This international search report consists of a total of sheets. | | | | | | | |
| Basis of the report a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item. The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)). | | | | | | | |
| b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I. | | | | | | | |
| 2. Certain claims were found un | searchable (See Box No. II) | | | | | | |
| 3. Unity of invention is lacking | (See Box No. III) | | | | | | |
| 4. With regard to the title, | | | | | | | |
| X the text is approved as submitted | | • | | | | | |
| the text has been established by | this Authority to read as follows: | | | | | | |
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| 5. With regard to the abstract, | | | | | | | |
| X the text is approved as submitt | ed by the applicant. | | | | | | |
| 1 | | as it appears in Box No. IV. The applicant | | | | | |
| | | h report, submit comments to this Authority. | | | | | |
| 6. With regard to the drawings, | | | | | | | |
| | olished with the abstract is Figure No. | 1 | | | | | |
| as suggested by the appli | | | | | | | |
| because the applicant failed to suggest a figure. | | | | | | | |
| <u></u> | characterizes the invention. | | | | | | |
| b. none of the figure is to be publ | ished with the abstract. | i | | | | | |
| | | | | | | | |

INTERNATIONAL SEARCH REPORT

International application No. PCT/KR2004/001727

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 F24C 15/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 F24C 7/02, F24C15/20, F23M7/00, H05B6/64, H05B6/80, A21B1/22

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Patent and application for inventions since 1975, Korean Utility Models and application for Utility Models since 1975 Japanese Utility Models and applications for Utility Models since 1975

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-------------------------|
| X Y | US 6,344,637 B2 (LG ELECTRONIC INC.) 5 FEBRUARY 2002 see the whole document | 11, 12, 14 13, 15-17 |
| Y | KR 97-44154 U (LG ELECTRONIC INC.) 31 JULY 1997 see the whole document | 15,16 |
| Y | US 5,918,589 A (WHIRLPOOL CORP.) 6 JULY 1999 see the whole document | 13 |
| X Y | JP 57-201421 U (TOKYO SHIBAURA CORP.) 22 DECEMBER 1982 see the whole document | 18, 25 17 |
| A | US 6,114,664 A (AMANA COMPANY) 5 SEPTEMBER 2000 see the whole document | 1-29 |
| A | US 4,618,756 B (WHIRLPOOL CORP.) 21 OCTOBER 1986 see the whole document | 1-29 |
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| | Further documents are listed in the continu | |
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| | hurther documents are listed in the continu | ation of Hoy (|
| | | |

X See patent family annex.

- Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other
- special reason (as specified)
 "O" document referring to an oral disclosure, use, exhibition or other
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

28 OCTOBER 2004 (28.10,2004)

Date of mailing of the international search report

30 OCTOBER 2004 (30.10.2004)

Name and mailing address of the ISA/KR



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Authorized officer

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Telephone No. 82-42-481-5475



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No. PCT/KR2004/001727

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
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| US 4,618,756 B | 21 OCT 1986 | NONE | |